Word Problems Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mixture Examples Goal 7 Day 12

**\*\*\*Set up a system of equations for each word problem. Then solve.**

**Mixture Word Problem Notes**

1. How many kilograms of zinc that is 18% pure should be mixed with 16 kilograms of alloy that is 24% pure to make an alloy that is 22% pure zinc?

2. Copper that was 95% pure was melted together with copper that was 75% pure to make 15 kilograms of an alloy that was 83% pure. How many kilograms of each kind were used?

3. Tin that was 35% pure was melted together with tin that was 45% pure to make 20 kilograms of an alloy that was 39% pure. How many kilograms of each were used?

4. Mrs. Kent operates a soybean farm. She buys many supplies in bulk. Often the bulk products need to be custom mixed before Mrs. Kent can use them. To apply herbicide to a large field she must mix a solution of 74% herbicide with a solution of 29% herbicide to form 52 liters of a 61% solution. Round your answers to the nearest percent. How much of the 74% solution must she use?

5. Mr. Mayflower operates a potato farm. He buys many supplies in bulk. Often the bulk products need to be custom mixed before Mr. Mayflower can use them. To apply herbicide to a large field he must mix a solution of 48% herbicide with a solution of 59% herbicide to form 76 liters of a 51% solution. Round your answers to the nearest percent. How much of the 48% solution must he use?

6.Mr. Griggins operates a melon farm. He buys many supplies in bulk. Often the bulk products need to be custom mixed before Mr. Griggins can use them. To apply herbicide to a large field he must mix a solution of 19% herbicide with a solution of 65% herbicide to form 119 liters of a 33% solution. Round your answers to the nearest percent. How much of the 19% solution must he use?